

Experienced Teachers' Institute (FY 2010-2011)
Strategies for the Struggling Reader: Diagnostics to Instruction

Lesson Plan Template

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Title: What is the question?	Content area: Reading, Math
Length of lesson: 30 minutes	NRS Level (s): 04
Standard(s) 4.4.5	

Lesson Objectives Use words like "recall," "define," "explain," "demonstrate," "predict," "compare," "contrast," "revise." Refer to Bloom's taxonomy	At the end of this lesson, students will be able to:
	Determine which operations will be used to solve each word problem
	Draw a diagram to illustrate a word problem
	Demonstrate solving word problems by writing a proportion
	Define vocabulary words: ratio, proportion, perimeter, diagram
	Summarize key steps in solving word problems

Assessing mastery of the objectives	<p>I will know that the lesson has been effective when my students can answer the following essential questions:</p> <p>What is the correct mathematical operation to use in this word problem and what is the correct answer?</p>	<p>The means of assessment and check for understanding will be:</p> <p>student reaction to problems word problem quiz</p>
Pre-teaching <ul style="list-style-type: none"> • How will I introduce the objectives? • How I will make a connection between the content and my students and engage? • How I will draw on prior knowledge? • How will I provide purpose for using the strategy and reading the selected text? 	<p>Objectives will be introduced utilizing the children's book <i>Love You Forever</i>.</p> <p>The narrative pyramid will be used to engage and make a connection between the book and the students.</p> <p>Prior knowledge will be drawn upon by asking, "what do you think this book will be about"?</p> <p>A word problem tells a story, with numbers, and asks the reader to find another number using addition, subtraction, multiplication, and/or division. The narrative pyramid will be used with word problems, as well as diagrams, and proportions. Purpose for using the strategy is to successfully relate today's word problems to a picture form enabling the student to solve word problems for the GED test and in life.</p>	

Instruction/Modeling

- How I will deliver the information so that students are engaged?
- How will I describe the strategy, provide purpose, model it and or provide examples?
- How will I introduce and engage students in the text?

Guided Practice

- How I will provide opportunities for students to practice in the classroom so I know they understand?
- How will I make sure they are “*getting it*” during the lesson?

Teacher talk: What clues are within the text of the book? **Sequence Clue Words**

What clues are within the text of the word problems? **Clue Words for Word Problems**

The strategy (summarizing) will be used along with the skill (sequence) to solve word problems.

After reading *Love You Forever* I will model using the narrative pyramid to determine key elements in the story. I will use the “Think Aloud” to help show the students how to summarize the story to fill in the pyramid.

Next, I will model the transition from narrative text using the book to using mathematical word problems when filling in the narrative pyramid.

In the first activity- **Solving Word Problems-Using the Correct Operation** the student and I will use the narrative pyramid to determine key information in the word problems. They will practice determining what question the problem is really asking and then which operations will be used to solve it.

Then, I will model utilizing the “Think Aloud” how to read a problem and draw a picture that visualizes what is being asked in the word problem.

In the second activity-**Drawing a Diagram** the student and I will practice drawing diagrams or pictures to illustrate the word problems. Then the student will practice diagrams with word problems.

Last, I will model using proportions to solve word problems by reminding them that the (sequence) order is very important. The order of the numbers should follow the order of the words.

In the third activity-**Using Proportions** the student and I will practice using proportions to solve word problems. Then, the student practice solving word problems using proportions.

All activities will begin with modeling by the instructor utilizing the “Think Aloud”, teacher and students will then practice problems together, then student will be asked to read problems and use the key elements to solve them.

	<p>Independent Practice</p> <ul style="list-style-type: none"> How I will help students extend what they learned so they can do it without my help? 	<p>I will provide students with additional material containing each of the three types of questions in this lesson including GED word problems from GED Score boost Mathematics.</p> <p>Students will be encouraged to use the ITTS website to practice the new skills.</p>
Post-teaching	<ul style="list-style-type: none"> How I will check for understanding? How I will bring closure & provide opportunities for reflection? 	<p>Questions and/or clarification will be provided based on the math activities.</p> <p>ITTS results will be reviewed to see if the lesson should be taught again.</p> <p>Closure and reflection will be provided by the teacher question - What do these three items have in common? (Pictures of the ABC order, a recipe, and an instruction sheet) They all contain sequence (order). Just as there are key elements in the story, we also can determine the important elements in a word problems and use visualization to help find the solutions.</p>
Text and Materials	<ul style="list-style-type: none"> Authentic Based on students interests and goals 	<p><i>Love You Forever</i> by Robert Munsch</p> <p>Math Problems- www.floridatechnet.org</p> <p>Achieving TABE Success in Math.</p> <p>Top 50 Math Skills</p>

How learning can be extended at home?	Contemporary's ITTS website.
Key vocabulary	<p>Vocabulary will be introduced at the beginning, middle, and reviewed at the end of class. Vocabulary is displayed in the classroom.</p> <p>Ratio-comparing two numbers and is written one of three ways: using the word <i>to</i>, with a colon, or as a fraction.</p> <p>Proportion-is a statement showing that one ratio is equal to another.</p> <p>Perimeter-the total length around the outside of a closed figure.</p> <p>Diagram- the picture of a problem.</p>
Use of technology (if appropriate)	<p>www.mathplayground.com/wordproblems.html</p> <p>www.wgcontemporary.com</p>